AMENDMENTS TO THE CLAIMS

1. (previously presented) A method of correcting the radial runout variation across the peripheral surface of the tread lugs of a tire; comprising the steps of:

locating the tire's center axis;

measuring a plurality of radial points in different locations about a circumference of the tire in each of several circumferential planes located between the tread shoulders; wherein the circumferential planes correspond to tread lugs;

determining a radial low point from the plurality of radial points in different locations for each circumferential plane;

determining a virtual tread profile from the radial low points; and

engaging a tread removal means to remove tread rubber to match the tread profile to the virtual tread profile.

2. (original) The method of claim 1 wherein the measurements are taken in at least three circumferential planes.

3. (previously presented) The method of claim 1 wherein the measurements are taken in at least five circumferential planes.

4. (previously presented) The method of claim 1 wherein the virtual tread profile is asymmetrical.

5. (previously presented) The method of claim1 further includes controlling the movement of the tread removal means by directing the movements to follow the virtual tread profile.

6. (original) The method of Claim 1 further includes controlling the rotational movement of the tire as the tread removal means traverses across the tread.

7. (currently amended) An apparatus for measuring a tire tread profile and truing said tire comprises

a base having linear bearing guide rails for directing movement in an X direction parallel to the axis of the tire to be measured and trued;

a profile measuring device mounted on a movable sled, the sled having linear bearings attached to the guide rail bearings;

a device for measuring a plurality of radial points in different locations about a circumference of the tire in each of several circumferential planes located between the tread shoulders; wherein the circumferential planes correspond to tread lugs;

calculation means for determining a radial low point from the plurality of radial points in different locations for each circumferential plane and then determining a virtual tread profile from the radial low points

a truing device assembly mounted on a movable carriage, the carriage having linear bearings attached to the guide rail bearings; and

a tire rotation device.

8. (original) The apparatus of claim 7 further comprises:

an electronic control system including a computer and software for compiling measurement data and establishing a virtual template to true the tire; the control system directs the movement of the truing device assembly.

9. (previously amended) The apparatus of claim 7 wherein the truing device assembly includes a truing cutter, truer device assembly having a Y direction movable carriage mounted to the X direction movable sled.

10. (original) The apparatus of claim 9 wherein the truer cutter includes a Z axis pivot system.

This listing of claims will replace all prior versions and listings of claims in the application.